

WHAT IS CLAIMED IS:

1. A power device for a vehicle sliding door, comprising:
a power unit having a wire drum rotated by motor

power;

a door opening cable and a door closing cable having a base end coupled with the wire drum, respectively;

a sliding door slidably attached to a vehicle body in a forward and door-closing direction and in a rearward and door-opening direction, said sliding door being slid in the door-closing direction or in the door-opening direction when the door opening cable and the door closing cable are taken up or drawn out by the rotation of the wire drum;

a rear door latch unit for keeping the sliding door at a full-closed position by being engaged with a rear striker fixed to the vehicle body;

a swing arm coupled with a ratchet of the rear door latch unit, said swing arm releasing the ratchet from a latch of the door latch unit when rotated;

a first clutch interposed between an output shaft of the motor and the wire drum; and

a second clutch interposed between the output shaft of the motor and the swing arm,

wherein the swing arm can be rotated through the first clutch and the wire drum can be successively rotated through the second clutch by the continuous rotation of the motor executed once.

2. A power device for a vehicle sliding door according to claim 1, wherein the swing arm can release the ratchet from

the latch even if the motor is rotated in any direction.

3. A power device for a vehicle sliding door according to claim 2, further comprising:

a latch/ratchet type full-open position holder for keeping the sliding door at a full-open position by being engaged with a full-open striker fixed to the vehicle body,

wherein the ratchet of the full-open position holder is also coupled with the swing arm, in addition to the ratchet of the rear door latch unit.

4. A power device for a vehicle sliding door, comprising:
a power unit having a wire drum rotated by motor power;

a door opening cable and a door closing cable having a base end coupled with the wire drum, respectively;

a sliding door slidably attached to a vehicle body in a forward and door-closing direction and in a rearward and door-opening direction, said sliding door being slid in the door-closing direction or in the door-opening direction when the door opening cable and the door closing cable are taken up or drawn out by the rotation of the wire drum;

a door latch unit for keeping the sliding door at a full-closed position by being engaged with a rear striker fixed to the vehicle body;

a cable take-up unit coupled with a latch of the door latch unit, said cable take-up unit rotating the latch from a half-latched position to a full-latched position when rotated;

a first clutch interposed between an output shaft of the motor and the wire drum;

a second clutch interposed between the output shaft of the motor and the cable take-up unit,

wherein the cable take-up unit can be rotated through the first clutch, and the wire drum can be successively rotated through the second clutch by the continuous rotation of the motor executed once.

5. A power device for a vehicle sliding door, comprising:
a power unit having a wire drum rotated by motor power;

a door opening cable and a door closing cable having a base end coupled with the wire drum, respectively;

a sliding door slidably attached to a vehicle body in a forward and door-closing direction and in a rearward and door-opening direction, said sliding door being slid in the door-closing direction or in the door-opening direction when the door opening cable and the door closing cable are taken up or drawn out by the rotation of the wire drum;

a door latch unit for keeping the sliding door at a full-closed position by being engaged with a rear striker fixed to the vehicle body;

a swing arm coupled with a ratchet of the door latch unit, said swing arm releasing the ratchet from a latch of the door latch unit when rotated;

a cable take-up unit coupled with the latch of the door latch unit, said cable take-up unit rotating the latch from a half-latched position to a full-latched position when rotated;

a first clutch interposed between an output shaft of the motor and the wire drum;

a second clutch interposed between the output shaft of the motor and the swing arm;

a third clutch interposed between the output shaft of the motor and the cable take-up unit,

wherein the swing arm can be rotated through the first clutch and the wire drum can be successively rotated through the second clutch by the continuous rotation of the motor executed once; and

wherein the cable take-up unit is rotated through the first clutch and the wire drum is successively rotated through the second clutch by the continuous rotation of the motor executed once.